

Strikethrough Versions of Amended Claims

1. (twice amended) A clay-polymer nanocomposite comprising an organoclay which has been exfoliated into a polymer matrix, the organoclay being the reaction product of a smectite clay with a quaternary onium compound mixture, wherein the quaternary onium compound mixture comprises a diester quaternary ammonium compound mixed with an additional quaternary ammonium compound, wherein the additional quaternary ammonium compound comprises a triester quaternary ammonium compound, a monoester quaternary ammonium compound, or mixtures thereof ; ~~and wherein the organoclay exhibits a decreased D_{001} peak with respect to an organoclay that is the reaction product of the smectite clay with a diester quaternary ammonium compound.~~
10. (twice amended) An organoclay comprising the reaction product of a smectite clay with a quaternary onium compound mixture wherein the quaternary onium compound mixture comprises a diester quaternary ammonium compound mixed with an additional quaternary ammonium compound, wherein the additional quaternary ammonium compound comprises a triester quaternary ammonium compound, a monoester quaternary ammonium compound, or mixtures thereof ; ~~and wherein the organoclay exhibits a decreased D_{001} peak with respect to an organoclay that is the reaction product of the smectite clay with a diester quaternary ammonium compound].~~
15. (twice amended) The organoclay composition of claim 14 10, wherein the fatty acids corresponding to the esters in the quaternary onium compound mixture for the quaternary ammonium compounds have a degree of unsaturation such that the iodine value ("IV") is from about 20 to about 90.
31. (amended) A method for preparing a nanocomposite comprising:

contacting a smectite clay with a quaternary onium compound mixture comprising a diester quaternary ammonium compound mixed with an additional quaternary ammonium compound, wherein the additional quaternary ammonium compound comprises a triester quaternary ammonium compound, a monoester quaternary ammonium compound, or mixtures thereof; and wherein the organoclay exhibits a decreased D_{001} peak with respect to an organoclay that is the reaction product of the smectite clay with a diester quaternary ammonium compound and

intermixing an organoclay with a polymer matrix.

35. (amended) The method of claim 34 31, wherein the fatty acids corresponding to the esters in the quaternary ammonium compound mixture for the quaternary ammonium compounds have a degree of unsaturation such that the iodine value ("IV") is from about 20 to about 90.